



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,325	12/26/2001	Akira Matsumoto	791_181	3228
25191	7590	03/30/2004		
Burr & Brown PO BOX 7068 SYRACUSE, NY 13261-7068				
EXAMINER SIMONE, CATHERINE A				
ART UNIT      PAPER NUMBER				
1772				

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/036,325	MATSUMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Catherine Simone	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Withdrawn Rejections***

2. The 35 U.S.C. 102 rejection of claims 1-6 and 20 as being anticipated by Watanabe et al. of record in the Office Action mailed 10/27/03, Pages 2-3, Paragraph #4, has been withdrawn due to the Applicant's amendment filed 1/16/04.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 2 and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Komoto et al. (JP 2000-009948; refer to computer translation).

Regarding **claims 1 and 21**, Komoto et al. discloses a ribboned polarization-maintaining fiber comprising a plurality of polarization-maintaining fibers (Drawings 1 and 2, #10); and a ribbon portion (Drawings 1 and 2, #30 (#30A and #30B)) having first and second lateral ends, and a length of 2 to 300 mm (see page 2, paragraphs #0016 and #0019) surrounding at least some

Art Unit: 1772

of the polarization-maintaining fibers, the polarization-maintaining fibers (Drawing 2, #10) extending individually from the second lateral end of the ribbon portion (Drawing 2, #30A), wherein the ribbon portion comprises a material (Drawing 1a, #30B) that can be stripped to expose the polarization-maintaining fibers (Drawing 1b, #14). Regarding **claim 2**, note the ribbon portion is one formed by fixing and coating the polarization-maintaining fibers with an adhesive (see page 2, paragraph #0011), and aligning end faces of the polarization maintaining fibers (Drawings 1 and 2, #10) which are used at least as a signal so as to become a predetermined plane of polarization.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 3-6 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Komoto et al. (JP 2000-009948; refer to computer translation) in view of Kozuka et al. (JP 06-230246; refer to computer translation).

Komoto et al. discloses a ribboned polarization-maintaining fiber comprising a plurality of polarization-maintaining fibers (Drawings 1 and 2, #10); and a ribbon portion (Drawings 1 and 2, #30 (#30A and #30B)) having first and second lateral ends, and a length of 2 to 300 mm (see page 2, paragraphs #0016 and #0019) surrounding at least some of the polarization-maintaining fibers, the polarization-maintaining fibers (Drawing 2, #10) extending individually

Art Unit: 1772

from the second lateral end of the ribbon portion (Drawing 2, #30A), wherein the ribbon portion comprises a material (Drawing 1a, #30B) that can be stripped to expose the polarization-maintaining fibers (Drawing 1b, #14). However, Komoto et al. fails to disclose a positioning means formed as a series of convex and concave shapes formed as a saw tooth shape or curved wavy shape disposed at a regular pitch or discontinuously. Kozuka et al. teaches that it is old and well-known in the analogous art to have a positioning means (Drawings 1(a-e), #10) formed as a series of convex and concave saw tooth shapes disposed at a regular pitch (Drawings 1(a-e), #11) for the purpose of maintaining alignment of the polarization-maintaining fibers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the ribboned polarization-maintaining fibers in Komoto et al. with a positioning means formed as a series of convex and concave saw tooth shapes disposed at a regular pitch as suggested by Kozuka et al. in order to maintain alignment of the polarization-maintaining fibers to form an optical fiber array.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-6, 20 and 21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501.

The examiner can normally be reached on 9:30-6:00.


Art Unit: 1772

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Catherine Simone  
Examiner  
Art Unit 1772  
March 22, 2004



HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/23/04